

## ABSTRACT

There is disclosed image predictive coding apparatus and method, image predictive decoding apparatus and method, and recording medium which stores therein the image predictive coding method or the image predictive decoding method, of which the transform efficiency is remarkably improved in comparison with the prior art. According to the image predictive coding apparatus and method, when dividing inputted image data to be coded into image data of a plurality of small regions which are adjacent to each other and coding the image data of an objective small region to be processed among the image data of the plurality of divided small regions which are adjacent to each other, reconstructed image data of a reproduction small region adjacent to the image data of the objective small region to be processed is used as image data of an intra-frame prediction small region of the objective small region to be processed, the image data of the intra-frame prediction small region is used as image data of an optimum prediction small region and image data of a difference small region which are differences between the image data of the objective small region to be processed and the image data of the optimum prediction small region is generated. Then, the generated image data of the difference small region is coded and outputted, and then the coded image data of the difference small region is decoded, so that the reconstructed image data of the reproduction small region is generated by adding the decoded image data of the difference small region to the image data of the optimum prediction small region.